

CURRICULUM VITAE



Name in full : Dr. CHELLAPILLA KAMESWARA RAO

Date of Birth : December 27, 1947

Address : Flat No. 302, Akruiti Suryanarayana Residency, Tirumala Nagar,
Nizampet, Hyderabad –500090, Telangana State, India.

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DEGREES

| DEGREE | UNIVERSITY | DEPARTMENT | YEARCLASS |
|--------|---|-------------------------------|------------|
| PGDCL | Nalsar University of Law | Cyber Law | 2005 A++ |
| PGDCL | Nalsar University of Law | Patent Law | 2004 B+ |
| Ph.D. | Andhra University, Waltair, India | Mechanical Engineering | 1976 - |
| M.E. | Andhra University, Waltair, India | Machine Design | 1971 71% |
| B.E. | Sree Venkateshwara Univ., Anantapur, India | Mechanical Engineering | 1968 67% |
| B.Sc | Andhra University Narasaraopet, India | Maths, Physics & Chemistry | 1965 First |

ACADEMIC AND PATENT EXPERIENCE :

| FROM | TO | EMPLOYER | POSITION |
|---------|----------|--|---|
| 09/2014 | ---- | Nalla Narasimha Reddy Engineering College | Professor(Mech.) |
| 11/2012 | 10/2013 | Gurunanak Institutions Technical Campus | Dean (Mech) |
| 01/2012 | 10/2012 | TKR College of Engineering & Technology | Dean (R&D), |
| | | Mech. Engg. | |
| 01/2011 | 01/2012 | Sreenidhi Institute of Science & Technology | Professor, |
| | | Mech.Engg | |
| 06/2009 | 01/2011 | Tirumala Engineering College, Bogaram | Principal |
| 09/2008 | 05/2009 | Hitech College of Engineering & Technology | Principal |
| 04/2008 | 09/ 2008 | Narsimha Reddy Engineering College | Principal |
| 03/2006 | 04/2008 | Scitech Patent Art Pvt Ltd. | Manager (Client Relations) |
| 02/2006 | 02/2006 | Nizam Institute of Engineering and Technology, Hyderabad | Vice-principal & Head, Dept. of Mech. Engg., |
| 08/2004 | 01/2006 | Muffakham Jah College of Engg., & Technology, Hyderabad | Professor & I/C M.E(Cad/Cam) Dept. of Mech. Engg. |
| 09/2003 | 08/2004 | Deccan College of Engg. & Tech., Hyderabad. | Professor & Head, Dept. of Mech. & Prod. Engg. |
| 07/1986 | 07/1988 | University of Ottawa, Dept. of Mechanical Engg. | Senior Lecturer & Post-Doctoral Fellow |
| 1975 | 1977 | Andhra University, Waltair | Lecturer/Reader |
| 1971 | 1975 | Andhra University, Waltair | Associate Lecturer |
| 1970 | 1971 | Andhra University, Waltair | Senior Research Fellow |

Patent Analysis & IP Experience

1. Worked as Head of Intellectual Property Management Group in Bharat Heavy Electricals Group, at Corporate R&D Division, Vikas Nagar, Hyderabad-500593 from 1999 to 2003. Instrumental in revitalizing Patent filing activity in the company. Conducted vigorous three-day Training Programs in all the EIGHT units of BHEL such as R&D, Hyderabad, Trichy, Bangalore, Bhopal, Hardwar, Delhi, Ranipet motivating company senior managers, design engineers and various work group leaders at various levels.
2. Achieved great success in increasing annual patent filings from BHEL multifold (Total filed 81 during 4 years) . Also filed International (PCT) Eight (8) Patents in the area of Gas Turbine and Steam Turbine Blades.
3. Attended Two-Week Patents Training Course at Tokyo in January 2000, through AOTS, Japan on deputation from BHEL.
4. After Voluntary Retirement from BHEL in 2003, working in various Engineering Colleges, taught the Subject of “Intellectual Property Rights” which is now a compulsory course for all the Engineering Streams such as Computer Science, Electrical and Electronics, Electronics and Communications, Civil and Mechanical Engineering Courses.
5. Worked as Client Manager, Sciotech Patent Art (www.patent-art.com) from 2006 to 2008 June handling customer patent services projects in the area of Packaging Technology related to various commercial products and also in the area of Automated Mechanical Razors.
6. On May 21, 2008 presented a paper at PIUG (Patent Information Users Group) Conference at Arlington, USA entitled “Claim Based Search Experiments on Latent Semantic Patent Search Engines” representing Sciotech Patent Art Services at the meeting .
7. As an educator Gave Specialised Lectures and conducted “Patent Based research Project Seminars” in several engineering colleges promoting the cause of creating Innovative Engineers for India.

8. The following are the links to Lectures posted on Youtube.com in this area:

(a) Patent Lectures: (7 Lectures)

https://www.youtube.com/watch?v=ABv_KFuSAdw (Lecture 1)

<https://www.youtube.com/watch?v=Zu4JNxJefiE> (Lecture 7)

(b) Intellectual Property Rights Lectures: (9 Lectures)

<https://www.youtube.com/watch?v=zVfVOkXcf9Y> (Lecture 1)

https://www.youtube.com/watch?v=_sKtfBXhjH4 (Lecture 9)

c) Patent Based Research Methodologies (20 Videos):

<https://www.youtube.com/watch?v=u2TT5z1iv30> (Lecture 1)

<https://www.youtube.com/watch?v=U3P3vxrlhXM> (Lecture 20)

(9) Papers published in Journals on Patent Landscape and Analysis:

1. Chellapilla Kameswara Rao, “Ignition Control of Advanced Combustion Engines - A Patent Landscape”, Recent Patents on Mechanical Engineering 2(2):154-164 · January 2010.

Global research and development on an innovative engine concept known as Homogeneous Charge Compression Ignition (HCCI) is being pursued aggressively and the gas engines employing this concept are expected to become commercially viable soon. The U.S. government is expected to institute the emission standard by 2009 and the same needs to be complied thereafter. Gas engines using HCCI will be gaining around 20 percent in fuel consumption. The present paper aims at mapping the patented technologies related to this engine concept. Global patent search retrieved a total of 171 patent families and an attempt is made in this paper to undertake mapping of these patents to get a clear idea about the major players in this area, technologies developed and country-wise patenting activity

2. Chellapilla Kameswara Rao, “Finite Element Analysis of Free Flexural Vibrations of a Rotor-Bearing System with Permanent Magnetic Bearings”, Int. J. Mech. Eng. Autom 3(6),221-230,2016. (includes review of patents filed in the area of Permanent Magnetic Bearings)

ACADEMIC TEACHING EXPERIENCE

The following were the subjects/Courses taught :

1. Andhra University, Waltair (from 1971 to 1977)

B.E.(Mech) : (1) Advanced Strength of Materials
(2) Computer Aided Design/CAM/CAE
(3) Numerical Methods & Computer Programming
(4) Engineering Mechanics

M.E(Machine Design): (1) Theory of Elasticity & Plasticity
(2) Theory of Mechanical Vibrations

2. University of Ottawa, Canada (from Sept. 1986 to June 1988)

Undergraduate : Engineering Mechanics I & II
Graduate : Advanced Vibrations

**Was on study leave from BHEL , Corporate R&D.
Worked as Visiting Professor and Post-Doctoral Research Fellow.**

3. Deccan College of Engineering & Technology, Hyderabad(2003 to 2004)

Undergraduate: (1) Product Design & Process Planning
(2) Finite Element Method
(3) Intellectual Property Rights

4. Muffakham Jah College of Engineering & Technology, Hyderabad(2004-06)

Undergraduate: (1) CAD/CAM
(2) Total Quality Management
(3) Entrepreneurship
(4) Intellectual Property Rights

M.E(CAD/CAM): (1) Theory of Elasticity & Plasticity
(2) Finite Element Method
(3) Computer Aided Mechanical Design & Analysis
(4) Vibration Analysis & Condition Monitoring

5. Sreenidhi Institute of Science & Technology (Jan 2010 to Jan 2011)

Undergraduate : (1) Mechanics of Solids
(2) Basics of Mechanical Engineering

M.Tech (CAD/CAM): (1) Mechanics of Composite Materials
(2) Theory of Mechanical Vibrations
(3) Optimum Design of Mechanical Elements

6. TKR College of Engineering & Technology (Jan 2011 to October 2011)

Undergraduate: In-charge of Final Year Projects, Viva Voce etc.,

M.Tech (CAD/CAM): (1) Mechatronics (2) Finite Element Analysis

7. Gurunanak Institutions Technical Campus (Nov. 2012 to Sept. 2013)

Undergraduate: (1) Mechanics of Solids (2) Finite Element Methods

In-charge of Final Year Projects and Comprehensive Viva Voce etc.

8. Nalla Narasimha Reddy Group of Institutions, Hyderabad, India, (Since September 2015. On Leave from 1st April 2017)

Undergraduate: (1) Design of Machine Elements I & II (2) Finite Element Method.

M.Tech.(Machine Design): (1) Mechanical Vibrations

(2) Theory of Elasticity and Plasticity.

INDUSTRIAL EXPERIENCE :

| YEAR FROM | TO | EMPLOYER | POSITION |
|--------------|------|---|--|
| 1998 | 2003 | Bharat Heavy Electricals Ltd. (Retd. On VRS) Corporate R&D Division | Senior Dy. General Manager & Head, Intellectual Property Management |
| 1994 | 1998 | Bharat Heavy Electricals Ltd. Corporate R&D Division | Dy. General Manager & Head, Consultancy Projects Group |
| 1990 | 1994 | Bharat Heavy Electricals Ltd. Corporate R&D Division | Sr. Manager & Head, Vibrations & Structural Dynamics |
| 1985 | 1990 | Bharat Heavy Electricals Ltd. Corporate R&D Division | Manager & Head, Vibrations & Structural Dynamics |
| 1981 | 1985 | Bharat Heavy Electricals Ltd. Corporate R&D Division | Dy. Manager & Head, Vibrations & Structural Dynamics |
| 1977 | 1981 | Bharat Heavy Electricals Ltd. Corporate R&D Division Vikasnagar, Hyderabad, India | Senior Engineer, Vibrations & Struct. Dyn. |

At Intellectual Property Management Group of BHEL R&D (from 1999 - 2003)

Gave **Guest Lectures** at various (a) BHEL Units such as Hyderabad, Trichy, Bhopal, Hardwar, Delhi, Ranipet, Gurgoan and at Corporate R&D Division, (b) Academic Staff College, JNTU and (c) Hyderabad Central University, on the Topics : (1) Intellectual Property Management (2) Patent Filing Procedures in US, Europe & Japan; (3) Creativity & Patent Literature (4) International Patent Search through Patent Literature; (5) Trademarks & Copyrights (6) Intellectual Property Value Assessment; (7) Cyberlaws & Web Based Literature; (8) Issues involved in Patent Opposition; (9) IP Licensing and Technology Transfer

Paper presented at PIUG2008 Annual Meeting at Arlington, USA on May 21, 2008 on “Claim Based Search Experiments on Latent Semantic Patent Search Engines”. lecture based in semantic analysis research, where he compared the retrieval results of different types of latent semantic analysis (LSA) with Boolean searching, over a variety of data sets and databases (both free and fee based) that offer LSA as an option. He revealed his short-term findings and offered criticism of each search engine. No long-term study results are available, as LSA is still a new development and this study is the first of its kind.

1. MAJOR PROJECTS HANDLED :

1. Three dimensional dynamic stress analysis of higher capacity boiler support structures using Finite Element Method.
 2. Seismic analysis of static excitation equipment, Circuit breakers, Instrument and power transformers and various sub-station equipment for Thermal and Nuclear power plants.
 3. Design and analysis of various critical Nuclear piping systems subjected to severe seismic loadings considering Multi-support excitation.
 4. Earthquake resistant design and analysis of Thermal and Nuclear high pressure and low pressure heaters, condensers, separator reheaters and deaerators.
1. Dynamic analysis of high speed turbo-generators along with their foundations and turbine and compressor blading.

Special Training Received & Projects Completed:

A. Special Training: Trained in Intellectual Property Law through AOTS of Japan for Two Weeks at TOKYO, Japan during January 2001 sponsored by BHEL.

B. PROJECTS COMPLETED:

I. Successfully executed special projects involving Design and Analysis of various Power Plant Structures, Equipment and Piping systems for both Nuclear and Thermal Power Plants.

II. Developed various special purpose Computer Programs for Design and Analysis of Boiler Support Structures, Piping Systems, Heat Exchangers such as Condensers.

III. Successfully executed about TWENTY projects in the area of Vibration Analysis and Seismic Qualification Studies. Some of the major investigations are as follows:

IV. Acted as committee member for Indian Standards Institution for Code on Earthquake Resistant Design of Power Equipment.

V. Extensively solved different class of problems utilising Finite Element Computer Codes such as ADINA, SAP IV/VI, KWUROHR and MEC21.

VI. Provided Technical Consultancy to Nuclear Power Board, Bombay, India, in the design and analysis of Main PHT System with Multi-support excitation for Kakkarpara Atomic Power Plant.

LIST OF INDUSTRIAL RESEARCH REPORTS :

1. G. Vijayakumar and C. Kameswara Rao, "Effects of Bellow and Pipe Support Stiffness on the Seismic Response of Piping Systems," Report No. SD/ESG/40/R:04/85, July 1985 (27 pages).
2. P. M. L. Prasad and C. Kameswara Rao, "Seismic Analysis of 70 MW Turbo-Generator Foundation," Report No. SD/ESG/40/R:05/85, October 1985 (21 pages).
3. A. K. Singh, C. Kameswara Rao, K. Ramadas and K. G. Bhatia, "NAPP Piping Seismic Analysis," (12 Reports), Report Nos. SD/ESG/40/R:1 to 12/82, October 1982 (30 pages each).
4. C. Kameswara Rao, P. M. L. Prasad and K. G. Bhatia, "Seismic Analysis of 3-Pole and Single Pole SF6 Circuit Breakers," Report No. SD/ESG/40/R:02/85, February 1985 (12 pages).
5. C. Kameswara Rao, "Seismic Analysis of Instrument Transformers," Part 1: Theoretical Formulation and Computer Program, Part 2: Analysis, Report No. RD:40:E:01 and 02/81, March 1981 (37 pages each).
6. C. Kameswara Rao, "Seismic Analysis of Excitation Transformer Cubicle for Narora Atomic Power Plant (NAPP)," Report No. SD/ESG/40/R:02/84, March 1984 (17 pages).
7. C. Kameswara Rao, and P. M. L. Prasad, "Seismic Analysis of 235 MW Condenser for Kakkarpara Atomic Power Plant (KAPP)," Report No. SD/ESG/40/R:02/86, March 1986 (16 pages).
8. R. Narasiah and C. Kameswara Rao, "Seismic Analysis of Heaters for Kutch Lignite Project," Report No. SD/ESG/01/R:01/85, March 1985 (18 pages).
9. M. S. Muthu, P. M. L. Prasad, and C. Kameswara Rao, "Vibration Analysis of Base Frames for F.D., I.D. and P.A. Fan-Motors-Farakka (3x200) STPP," Report No. SD/ESG/50/R:05/83, December 1983 (33 pages).
10. C. Kameswara Rao, K. Ramadas, A. K. Singh and K. G. Bhatia, "Seismic Analysis of 2x110 MW Boiler Support Structure for Muzzafarpur Thermal Power Plant," Unpublished Report, Corporate R&D Divn., BHEL, 1981 (110 pages).
11. C. Kameswara Rao et. al., "Failure Analysis of Blast Furnace Raw Gas Pipeline of Rourkela Steel Plant," June 1990.

REFEREED JOURNAL AND CONFERENCE PUBLICATIONS : (Arranged in order from latest to past ones)

94. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, “Vibrations of Circular Plates Resting on Elastic Foundation with Elastically Restrained Edge Against Translation”, The Journal of Engineering Research (TJER), Vol. 15, No. 1 (2018) 14-25.
93. Chellapilla Kameswara Rao, Lokavarapu Bhaskara Rao, “Torsional Post-Buckling of a Simply Supported Thin-Walled Open-section Beam Resting on a Two-Parameter Foundation”, Journal of Applied Mechanics and Technical Physics, January 2018, Vol. 59, No. 1, pp. 176–184.
92. Shankarachar Sutar, Radhakrishna Madabhushi, Kameswara Rao Chellapilla, and Ramesh Babu Poosa, “Determination of Natural Frequencies of Fluid Conveying Pipes using Muller’s Method”, J. Inst. Eng. India Ser. C, 10th March 2018.
91. Chellapilla Kameswara Rao, Lokavarapu Bhaskara Rao, Nonlocal Critical Velocities of Fluid Conveying Clamped-Pinned Single-Walled Carbon Nanotubes Subjected to Axial Magnetic Field, Engineering Transactions, Vol. 65(2), Pages 1-15, 2017.
90. Chellapilla Kameswara Rao, Lokavarapu Bhaskara Rao, Torsional post-buckling of thin-walled open section clamped beam supported on Winkler-Pasternak foundation, Thin-walled Structures, Vol.116, Pages 320-325,2017.
89. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Vibrations of Circular Plates with Elastically Restrained Edge against Translation and Resting on Elastic Foundation, The Journal of Engineering Research (TJER), Vol. 13, No. 2 (2016) 187-196.
88. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, An exact frequency analysis of annular plates with small core having elastically restrained outer edge and sliding inner edge, Applied Acoustics 109,69-81,2016
87. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Vibrations of circular plate supported on a rigid concentric ring with transnational restraint boundary, Engineering Transactions 64(3),259-269,2016
86. Chellapilla Kameswara Rao, S Sutar, R Madabhushi, Effect of Weld Tension on Flexural Frequencies of Guided-Simply Supported Fluid-Conveying Pipes, Int. J. Mech. Eng. Autom 3(8),319-324,2016
85. CK Rao, Finite Element Analysis of Free Flexural Vibrations of a Rotor-Bearing System with Permanent Magnetic Bearings, Int. J. Mech. Eng. Autom 3(6),221-230,2016
84. LB Rao, CK Rao, Frequency Aanalysis of Annular Plates Having a Small Core and Guided Edges at Both Inner and Outer Boundaries, Journal of Solid Mechanics Vol 8(1),168-174,2016

83. LB Rao, CK Rao, Buckling of circular plate with foundation and elastic edge, International Journal of Mechanics and Materials in Design, 11(2),149-156,2015
82. LB Rao, CK Rao, Vibrations of a Rotationally Restrained Circular Plate Resting on a Concentric Rigid Ring Support, 220,2015
81. LB Rao, CK Rao, Analysis of vibration natural frequencies of rotationally restrained and simply supported circular plate with weakened interior circle due to an angular crack, Strength of Materials 47(6),859-869,2015
80. LB Rao, CK Rao, Buckling of elastic circular plates with an elastically restrained edges against rotation and internal elastic ring support, International Applied Mechanics 51(4),480-488,2015
79. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Frequencies of circular plate with concentric ring and elastic edge support, Frontiers of Mechanical Engineering 9(2),168-176,2014.
78. Lokavarapu Bhaskara Rao, Chellapilla K Rao, Frequency analysis of annular plates with inner and outer edges elastically restrained and resting on Winkler foundation, International Journal of Mechanical Sciences 81, 184-194,2014.
77. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Fundamental buckling of circular plates with elastically restrained edges and resting on concentric rigid ring support, Frontiers of Mechanical Engineering 8(3),291-297,2013.
76. Lokavarapu Bhaskara Rao and Chellapilla Kameswara Rao, Frequencies of Circular Plates Weakened Along an Internal Concentric Circle and Elastically Restrained Edge Against Translation, Journal of Appied. Mechanics, Volume 80, Number 1, Paper No. 011005-1 to 011005-7, January 2013.
75. Lokavarapu Bhaskara Rao and Chellapilla Kameswara Rao, Fundamental Buckling of Circular Plates with Elastically Restrained Edges and Resting on Concentric Rigid Ring Support, Frontiers of Mechanical Engineering, DOI 10.1007/s11465-013-0255-9, 2013.
74. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Vibrations of Elastically Restrained Circular Plates Resting on Winkler Foundation, Arabian Journal for Science & Engineering,2013
73. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Frequencies of circular plates weakened along an internal concentric circle and elastically restrained edge against translation, Journal of Applied Mechanics 80 (1), 011005,2013

72. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Buckling of annular plates with elastically restrained external and internal edges, *Mechanics Based Design of Structures and Machines* 41(2),222-235,2013
71. Lokavarapu Bhaskara Rao, Chellapilla Kameswara Rao, Vibrations of circular plates with guided edge and resting on elastic foundation, *Journal of Solid Mechanics* 4(3),307-312,2012
70. Lokavarapu Bhaskara Rao and Chellapilla Kameswara Rao, “ Buckling of Circular Plates with an Internal Elastic Ring Support and Outer Edge Restrained Against Translation”, *Journal of Engineering Science and Technology*, Vol. 7, No.3, June 2012, pp. 393 – 401.
69. Lokavarapu Bhaskara Rao and Chellapilla Kameswara Rao, "Free Vibration of Circular Plates with Elastic Edge Support and Resting on an Elastic Foundation",*International Journal of Accoustics and Vibration*, Volume 17, Number 4, December 2012, pp.204-207.
68. L. Bhaskara Rao and C. Kameswara Rao, “Vibrations of elastically restrained circular plates resting on Winkler Foundation”, Accepted for publication in *The Arabian Journal for Science and Engineering*, March 2012.
67. Simha, H. S. and Kameswara Rao, C. “Thermal Buckling of Fluid Conveying Single-Walled Carbon Nanotubes Embedded in an Elastic Medium”, *International Conference on Nanotechnology & Functional Materials*, SNIST, Hyderabad, 2012.
66. Simha, H. S. and Kameswara Rao, C. “Free Vibrations of Fluid Conveying Single-Walled Carbon Nanotubes”, *International Conference on Nanotechnology & Functional Materials*, SNIST, Hyderabad, 2012.
65. Kameswara Rao, C. and Simha, H. S. “Vibrations of Fluid-Conveying Pipes Resting on Two-parameter Foundation”, *The Open Acoustics Journal*, Banthem Publications, 2008, 1, 24-33.
64. Simha, H. S. and Kameswara Rao, C. “Critical Velocity of Fluid Conveying Pipes Resting on Two-parameter Foundation”, *Journal of Sound and Vibration* 302 (2007) 387–397
63. Kameswara Rao, C., Sravana Kumar, G., Vijaya Kumar, K., and Sameer, T., “ Fundamental Frequencies of Restrained Cantilever Blades including the Effects of Thermal Gradient”, *Proceedings of RACE 2006*, March 3-5, 2006, Osmania University, India.
62. Kameswara Rao, C., and Ratna Kiran V., “ Finite Element Analysis of Torsional Vibrations of Thin-Walled Beams on Two Parameter Foundation”, *Proceedings of RACE 2006*, March 3-5, 2006, Osmania University, India.

61. Kameswara Rao, C., and Bhaskara Rao, L., “Vibrations of Elastically Restrained Circular Plates on Winkler’s Foundation”, Proceedings of RACE 2006, March 3-5, 2006, Osmania University, India.
60. Kameswara Rao, C., and Ratna Kiran, V., “Torsional Vibrations of Thin-walled Beams Resting on Continuous Two Parameter Foundation”, Proceedings of National Conference on Advances in CAD/ CAM, February 27-28, 2006, JNTU College of Engineering, Kakinada, A.P., India.
59. Chellapilla, Kameswara Rao., and Hari Simha, “Critical Flow Velocities of Elastically Restrained Multi-span Fluid Conveying Pipes Resting on Continuous Elastic Foundation”, Proceedings of the 13th International Conference on Nuclear Engineering, Beijing, China, May 2005 Paper No.50473
58. Kameswara Rao, C. “Frequency Analysis of Boiler Support Structure Subjected to Earthquake Excitation”, (Keynote Speech), Proceedings of International Conference on Advances in Structural Dynamics and its Applications (ICASDA-2005), Conference held at GITAM, Visakhapatnam – 539 045, during 7-9 Dec. 2005, pp. 415 – 424.
57. Kameswara Rao, C., and Ramesh, M., “Free Torsional Vibrations of Generally Restrained Thin-walled Beams of Open Section”, Proceedings of ICASDA 2005, pp. 210 – 217.
56. Kameswara Rao, C., and Simha, H., “Critical Velocity of Fluid Conveying Pipes Resting on Two-Parameter Foundation”, Proceedings of ICASDA 2005, pp. 609 – 617.
55. Radhakrishna, M., and Kameswara Rao, C., “Vibrations of Double Bellows Type Expansion Joint in Lateral and Rocking Modes”, Accepted for Publication in International Journal of Structural Stability and Dynamics, Published by World Scientific Publishing Co. Pte Ltd, London, U.K.,
54. Kameswara Rao, C and Radhakrishna, M. “Seismic Response of Elastically Restrained Single Bellows Expansion Joint in Lateral Mode”, Proceedings of the Eleventh International Conference on Nuclear Engineering, April 20-24, 2003, Tokyo, Japan, Paper No. ICONE 11-36400, pp 1-6.
53. Radhakrishna, M and Kameswara Rao, C. “Axial Vibrations of U Shaped Bellows with Elastically Restrained End Conditions”, Thin-walled Structures, Vol. 42, 2004, pp. 415 – 426, Published by Elsevier Applied Science Publishers, Great Britain.
52. Kameswara Rao, C and Radhakrishna, M. “Transverse Vibrations of Single Bellows Expansion Joint Restrained Against Rotation”, Proceedings of the Tenth International Conference on Nuclear Engineering, April 14-18, 2002, Arlington, Virginia, USA, Paper No. ICONE 10-22090, pp. 1-5.

51. Kameswara Rao, C and Radhakrishna, M. "Transverse Vibrations of Double Expansion Joint Restrained Against Rotation", Proceedings of the Tenth International Conference on Nuclear Engineering, April 14-18, 2002, Arlington, Virginia, USA, Paper No. ICONE 10-22092.
50. Radhakrishna, M and Kameswara Rao, C. "Finite Element Analysis of Axial Vibrations of Single Bellows Elastically Restrained Against Rotation", Proceedings of Second International Conference on Vibration Engineering and Technology of Machinery, VETOMAC-2, December 16-18, 2002, Mumbai, India.
49. Radhakrishna, M and Kameswara Rao, C. "Finite Element Analysis of Transverse Vibrations of Single Bellows Expansion Joint Restrained Against Rotation", Paper communicated to Journal of Thin-Walled Structures, Elsevier Applied Science Publishers, Great Britain, 2002.
48. Radhakrishna, M and Kameswara Rao, C. "Vibrations of Fluid Filled Bellows- A State-of-the-Art", Proceedings of the National Symposium on Advances in Structural Dynamics and Design, Jan 9-11, 2001.
47. Simha, H. & Kameswara Rao, C., "Finite Element Analysis of Vibrations of Rotationally Restrained Fluid Conveying Pipes Resting on Soil Medium" Proceedings of the National Symposium on Advances in Structural Analysis and Design, pp 569-578, Allied Publishers, Chennai, January 2001.
46. Simha, H, and Kameswara Rao, C., "Finite Element Analysis of Vibrations of Rotationally Restrained Fluid Conveying Pipes Resting on Soil Medium", Proceedings of the Conference on Advances in Structural Dynamics and Design held at SERC, Chennai, Jan 2001, pp.569-577.
45. Srinivasulu, N. V. & Kameswara Rao, C., "Galerkin Finite Element Analysis of Free Torsional Vibrations of Tapered Cantilever I-Beams" Paper no. CP071, Proceedings of Vibration Engineering and Technology of Machinery, IISc, Bangalore, October 2000.
44. Simha, H. & Kameswara Rao, C., "Finite Element Analysis of Vibrations Fluid Conveying Pipes Resting on Soil Medium", Proceedings of the Technical Conference on Pressure Vessels and Piping, pp 173-182, Hyderabad, October 1997.
43. Raghava Chary, S., Kameswara Rao, C., and Iyengar, R. N., "Vibration of Fluid Conveying Pipe on Winkler Foundation," Proc of 8th National Convention of Aerospace Engineers on Aeroelasticity, Hydroelasticity and other Fluid-Structure Interaction Problems, IIT Kharagpur, India, pp. 266-287, March 5-6, 1993.
42. Kameswara Rao, C., "Frequency Analysis of Two-Span Uniform Euler-Bernoulli Beams," Journal of Sound and Vibration, Vol. 137, pp. 144-150, 1990.

41. Kameswara Rao, C., "Frequency Analysis of Clamped-Clamped Uniform Beams with Immediate Elastic Support," *Journal of Sound and Vibration*, Vol. 133, pp. 502-509, 1989.
40. Kameswara Rao, C., and Mirza, S., "Torsional Post-Buckling of Thin-Walled Beams Resting on Continuous Elastic Foundation," *Thin-Walled Structures*, Vol. 8, pp. 55-62, 1989.
39. Kameswara Rao, C., and Mirza, S., "Torsional Vibrations and Buckling of Thin-Walled Beams on Elastic Foundation," *Thin-Walled Structures*, Vol. 7, pp. 73-82, 1989.
38. Kameswara Rao, C., and Mirza, S., "Seismic Analysis of High Speed Rotating Machinery," *Nuclear Engineering and Design*, Vol. III, pp. 395-402, 1989.
37. Kameswara Rao, C., and Mirza, S., "A Note on Vibrations of Generally Restrained Beams," *Journal of Sound and Vibration*, Vol. 130, pp. 453-465, 1989.
36. Kameswara Rao, C., "Fundamental Frequencies of Cantilever Blades with Resilient Roots," *Journal of Sound and Vibration*, Vol. 126, pp. 363-366, 1988.
35. Kameswara Rao, C., "Torsional Frequencies and Mode Shapes of Generally Constrained Shafts and Piping," *Journal of Sound and Vibration*, Vol. 125, pp. 115-121, 1988.
34. Kameswara Rao, C., and Mirza, S., "Accurate Estimates of Natural Frequencies and Mode Shapes of Flexible Piping Carrying an Arbitrarily Located Heavy Valve," Chapter 3 - Pipeline Dynamics, *Proc. of PVP Conference*, Pittsburg, Pennsylvania, Seismic Engineering, PVP-Vol. 144, pp. 221-226, June 1988.
33. Kameswara Rao, C., and Mirza, S., "Free Torsional Vibrations of Tapered Cantilever I-Beams," *Journal of Sound and Vibration*, Vol. 124, pp. 489-496, 1988.
32. Kameswara Rao, C., and Mirza, S., "Seismic Analysis of High-Speed Rotating Machinery," *Proc. of 9th International Conference on Structural Mechanics in Reactor Technology*, Lausanne, Invited Paper No. K-18-1, August 1987.
31. Kameswara Rao, C., and Mirza, S., "Influence of Flexible Connections on the Seismic Response of a Nuclear Condenser," *Proc. Canadian Conference on Earthquake Engineering*, pp. 553-558, July 1987.
30. Kameswara Rao, C., and Mirza, S., "Seismic Response of Flexibly Connected Piping Systems," *Proc. of ASME Pressure Vessels and Piping Conference*, San Diego, Seismic Engineering, PVP Vol. 127, pp. 308-313, June 1987.

29. Kumar, G. V., Kameswara Rao, C., and Chary, S. R., "Pipe Support Design for Dynamic Loads," Proc. of ASME Pressure Vessels and Piping Conference, San Diego, Seismic Engineering, PVP Vol. 127, pp. 303-308, June 1987.
28. Kameswara Rao, C., and Mirza, S., "Vibration Frequencies and Mode Shapes for Generally Restrained Bernoulli-Euler Beams," Proc. of ASME Pressure Vessels and Piping Conference, San Diego, Recent Advances in Structural Dynamics, PVP-Vol. 124, pp. 117-121, June 1987.
27. Prasad, P. M. L., and Kameswara Rao, C., "Seismic Analysis of SF6 Circuit Breaker," Proc. Of National Symposium on Vibration of Power Plant Equipment, Bombay, pp. III-6.1 to III-6.9, March 1986.
26. Kameswara Rao, C., and Prasad, P. M. L., "Seismic Analysis of 70 MW Turbo-Generator Rotor Bearing System," Proc. of National Symposium on Vibration of Power Plant Equipment, Bombay, pp. II-9.1 to II-9.9, March 1986.
25. Kameswara Rao, C., "Effects of Bellow and Pipe Support Stiffness on Dynamic Response of Piping Systems," Proc. of ASME Pressure Vessels and Piping Conference, New Orleans, Recent Advances in Seismic Design of Piping and Components, PVP-Vol. 98-3, pp. 267-271, June 1985.
24. Rao, J. S., Prasad, P. M. L., and Kameswara Rao, C., "Seismic Analysis of Gasifier Support Structure," Proc. of Mid-Trem Symp. on Earthquake Effects on Plant and Equipment, Hyderabad, Vol. I, pp. 177-181, December 1984.
23. Kameswara Rao, C., Pillai, K. S., and Prasad, P. M. L., "Seismic / Wind Analysis of Common Condenser for a Chemical Plant," Proc. of Mid-Trem Symp. on Earthquake Effects on Plant and Equipment, Hyderabad, Vol. I, pp. 257-260, December 1984.
22. Kameswara Rao, C., and Prasad, P. M. L., "Seismic Analysis of 70 MW Turbo-Generator Foundation," Proc. of Mid-Trem Symp. on Earthquake Effects on Plant and Equipment, Hyderabad, Vol. I, pp. 143-149, December 1984.
21. Kameswara Rao, C., and Vijaya Kumar, G. V., "Effects of Support and Bellow Stiffnesses on Piping Seismic Response," Proc. of Mid-Trem Symp. on Earthquake Effects on Plant and Equipment, Hyderabad, Vol. I, pp. 107-111, December 1984.
20. Kameswara Rao, C., "Seismic Analysis of Rotating Mechanical Systems - State of the Art," 28th Congress of Indian Society of Theoretical and Applied Mechanics, December 1983.
19. Kameswara Rao, C., and Bhatia, K. G., "Evaluation of Seismic Analysis Techniques for Static Electrical Equipment," Proc. of Seventh Symp. on Earthquake Engineering, Roorkee, Vol. I, pp. 583-588, November 1982.

18. Singh, A. K., Ramadasa, K., Kameswara Rao, C., and Bhatia, K. G., "Seismic Analysis of General Piping System for Narora Atomic Power Plant," Proc. of Seventh Symp. on Earthquake Engineering, Roorkee, Vol. I, pp. 571-575, November 1982.
17. Kameswara Rao, C., and Bhatia, K. G., "Seismic Analysis of 220 kV Current and Voltage Transformers," Proc. of Seventh Symp. on Earthquake Engineering, Roorkee, Vol. I, pp. 565-569, November 1982.
16. Kameswara Rao, C., Ramadasa, K., Singh, A. K., and Bhatia, K. G., "An Approximate Analysis of 110 MW Boiler Supporting Structure Subjected to Seismic Excitation," Proc. of Seventh Symp. on Earthquake Engineering, Roorkee, Vol. I, pp. 561-564, November 1982.
15. Kameswara Rao, C., "Seismic Analysis of Instrument Transformers," Proc. of Symp. On Earthquake Disaster Mitigation, Roorkee, India, Vol. I, pp. 165-170, March 1981.
14. Kameswara Rao, C., Ramadasa, K., Singh, A. K., and Bhatia, K. G., "Three Dimensional Analysis of 110 MW Boiler Supporting Structure Subjected to Seismic Excitation," Proc. of Seventh World Conference on Earthquake Engineering, Istanbul, Turkey, Vol. 5, pp. 601-608, September 1980.
13. Kameswara Rao, C., "Non-linear Torsional Vibrations and Stability of Thin-Walled Beams on Elastic Foundation," Symposium on Large Deformations, IIT, New Delhi, December 1979.
12. Kameswara Rao, C., "Galerkin Finite Element Analysis of Torsional Vibrations of Tapered Cantilever I-Beams on Elastic Foundation," Proc. of AGM of Aeronautical Society of India, August 1978.
11. Rao, N. L. N., and Kameswara Rao, C., "Vibration Frequencies for Uniform Timoshenko Beams with Central Masses," Machine Building Industry, pp. 5-8, September 1978.
10. Kameswara Rao, C., "Free Torsional Vibrations of Viscoelastic Thin-Walled Beams of Open Section," Journal of the Aeronautical Society of India, Vol. 29, Nos. 1,2, pp. 43-48, February-May 1977.
9. Kameswara Rao, C., "Forced Torsional Vibrations of Thin-Walled Beams of Open Section with Longitudinal Inertia, Shear Deformation and Viscous Damping," Journal of the Aeronautical Society of India, Vol. 28, No. 4, pp. 405-412, November 1976.
8. Kameswara Rao, C., "On the Torsional Wave Propagation in Orthotropic Thin-Walled Beams of Open Section Including Longitudinal Inertia and Shear Deformation," Journal of the Aeronautical Society of India, Vol. 28, No. 3, pp. 283-288, September 1976.

7. Kameswara Rao, C., and Prasada Rao, K. S. R., "Frequency Analysis of Rectangular Isotropic Plates by Galerkin Method," Journal of the Aeronautical Society of India, Vol. 28, No. 1, pp. 113-120, February 1976.
6. Kameswara Rao, C., and Sarma, P. K., "The Fundamental Frequency of Simply Supported Beams with Uniform Taper," Journal of the Aeronautical Society of India, Vol. 27, No. 4, pp. 169-171, November 1975.
5. Kameswara Rao, C., and Satyanarayana, B., "Effect of Thermal Gradient on Frequencies of Tapered Rectangular Plates," AIAA Journal, Vol. 13, No. 8, pp. 1123-1126, August 1975.
4. Kameswara Rao, C., "Nonlinear Torsional Vibrations of Thin-Walled Beams of Open Section," J. of Appl. Mech., Trans. ASME, pp. 241-243, March 1975.
3. Kameswara Rao, C., and Appala Satyam, A., "Torsional Vibrations and Stability of Thin-Walled Beams on Continuous Elastic Foundation," AIAA Journal, pp. 232-234, February 1975.
2. Kameswara Rao, C., Gupta, B. V. R. and Rao, D. L. N., "Torsional Vibrations of Thin-Walled Beams on Continuous Elastic Foundation Using Finite Element Method," Proc. of the Intl. Conference on Finite Element Methods in Engineering, Coimbatore, pp. 231-248, December 1974.
1. Kameswara Rao, C., Appa Rao, K. V., and Sarma, P. K., "Effect of Longitudinal Inertia and of Shear Deformation on the Torsional Frequency and Normal Modes of Thin-Walled Open Section Beams," Journal of the Aeronautical Society of India, Vol. 26, Nos. 1,2, pp. 32-41, May 1974.

TOPIC OF DOCTORAL THESIS : (Submitted to Andhra Univ., in 1975, **Awarded in 1976**)

TORSIONAL VIBRATIONS AND STABILITY OF THIN-WALLED BEAMS OF OPEN SECTION RESTING ON CONTINUOUS ELASTIC FOUNDATION.

Doctoral Theses Guided:

1. M. Radhakrishna, "Vibrations and Stability of Elastically Restrained Expansion Bellows", Awarded PhD from Osmania University, **October 2004**.
2. L. Bhaskara Rao, "Study of Elastic Stability and Vibrations of Circular and Annular Plates on Generalised Elastic Medium", Awarded PhD from Osmania University, **December 2008**.
3. Mr. N.V. Srinivasulu, "*Vibrations of Composite Thin-Walled Beams of Open Section*", Awarded PhD from Osmania University, **October 2010**.

4. Mr. Hari Simha, “*Vibrations of Fluid Conveying Pipes resting on Two Parameter Foundation*”, Thesis Submitted to Osmania University for the Degree of PhD, **January 2012**. (Examiner’s Recommended Award, Viva-Voce exam.expected in October 2013)